STELLINGEN

behorende bij het proefschrift

Endothelial-specific delivery of siRNA by novel SAINT-based lipoplexes
An in vitro and in vivo study

1. Endothelial-specific siRNA delivery presents a promising strategy for anti-inflammatory interventions aiming at silencing disease-associated genes involved in the pathophysiology of acute or chronic inflammation. *(this thesis)*

2. PEGylated, antibody targeted SAINT-based lipoplexes (antibody-SAINTPEGargs) are suitable devices for selective delivery of siRNA into inflammation-activated endothelial cells of different vascular origins. *(this thesis)*

3. If all anti-VCAM-1-SAINTPEGargs that homed to VCAM-1 protein expressing vasculature *in vivo* would effectively release their nucleic acid cargo, they would be very potent in terms of target gene down-regulation.

4. To design an endothelial-specific siRNA delivery system with true potential for *in vivo* application, evaluating the siRNA delivery systems in a clinically relevant *in vivo* animal model at an early stage in their development is crucial.

5. Despite the effect on carrier size, incorporation of Calf Thymus-DNA in SAINT-lipoplexes does not result in beneficial effects on target gene down-regulation. *(this thesis)*

6. RNAi-based therapeutic interventions will be an established therapeutic modality when the delivery-related issues have been overcome.

7. Negative results have considerably more impact on science than positive results.

8. Do not go where the path may lead, go instead where there is no path and leave a trail. *(Ralph Waldo Emerson)*

9. If we knew what it was we were doing, it would not be called research, would it? *(Albert Einstein)*

10. "Vrijheid" is een volgetankte Mercedes.

Niek Leus
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